

# List of the Pselaphine Beetles (Insecta, Coleoptera, Staphylinidae) Collected from Central Laos in 2013–2014

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**Abstract** Five species in four genera have been known from Laos. In the present study, 51 species of 32 genera (at least 24 known genera) of Pselaphinae collected from Central Laos are listed up. The following four species are recorded from Laos for the first time: *Arthromelodes reichenbachii* (Motschulsky, 1851), *Pareuplectops coomani* Jeannel, 1957, *Pselaphus multangulus* Schaufuss, 1877, *Curculionellus setosus* Jeannel, 1952.

**Key words:** fauna, Laos, new record, Pselaphinae, Staphylinidae.

## Introduction

Up to the present, the following five species in four genera of the subfamily Pselaphinae of the family Staphylinidae have been known from Laos: *Pareuplectops sommoo* Kurbatov et Cucodoro, 2009, *Intestinarius orthopygium* Kurbatov, 2007, *I. crassicornis* Kurbatov, 2007, *Cratna cicatricosa* Raffray, 1918 and *Paralasinus gigas* Hlaváč and Nomura, 2001. Though, the pselaphine fauna is supposed to be very rich given that the large diversity of pselaphines in the neighbouring countries is taken into account Thailand (Nomura, Sakchoowong, Ogata, Chanpaisaeng, 2008a, 2008b; Nomura, Sakchoowong, Chanpaisaeng, 2010, Nomura, Sakchoowong, Maruyama, 2013) and Vietnam (Nomura, 2013).

In the present study, a list of pselaphine species collected from Central Laos by some Japanese entomologists and the author is given. The field survey was conducted by the project of KAKENHI by the Tokyo University of Agriculture, Atsugi, Japan. In this study, a list including 51 species of 32 genera (at least 24 known genera) are present. The following species are recorded from Laos for the first time: *Arthromelodes reichenbachii* (Motschulsky, 1851), *Pareu-*

*plectops coomani* Jeannel, 1957, *Pselaphus multangulus* Schaufuss, 1877, and *Curculionellus setosus* Jeannel, 1952.

## Materials and Methods

Most of the pselaphine species in this study were collected by the following five methods: large type of light trap (LT), portable light trap in Nakase system (NLT), Winkler extraction from leaf litter (WE), beating on bush (BT), and hand sifting of leaf litter (HS).

The large type of light trap was settled by Mr. Wakahara using mercury lamps, generator and large white sheets (Fig. 2C). The portable light traps each with a fluorescent tube 4W in the system of Dr. Yuta Nakase were used for collecting pselaphine beetles by Nomura (see Nomura *et al.*, 2010, 2013: Fig. 2D). They were fixed or hooked on a tree and lighted in evening and they were collected in the next morning. Some pselaphine species were collected by hand sifting leaf litter and beating dead branches (Fig. 2A, B), and the other some were extracted by the simplified type of Winkler apparatus from sifted leaf litter (WE: Fig. 2F).

For the SEM observation, all specimens were

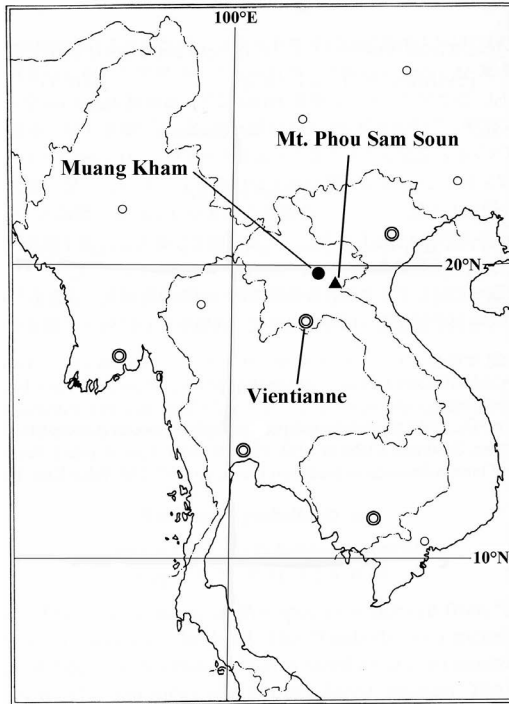


Fig. 1. A map of surveyed points at Laos in 2013–2014.

air dried, uncoated, and illustrated with an SEM fit with a digital microscope system (KEYENCE VHX-2000 + VHX-D510) under AV 0.9–2.0 kv. Collected specimens are tentatively preserved in the collection of the National Museum of Nature and Science (NMNS), Tokyo, Japan.

## Results

### A List of Pselaphine Specimens Collected from Laos in 2013–2014

All collecting sites shown below belong to Xieng Kouang Province, CE Laos.

Supertribe Euplectitae  
Tribe Bythinoplectini  
Subtribe Bythinoplectina

#### 1. Bythinoplectina gen. sp. 1 (Fig. 3A)

*Specimen examined.* 1 female, Ban Paksa, 1,636 m alt., 24. v. 2013, S. Nomura leg.

*Remarks.* In the subtribe Bythinoplectina, most of Asian genera is indistinctly defined. According to Coulon (1989), this species is closely allied to *Zethopsus opacus* (Schaufuss) in the structure of the segment IV of the maxillary palpus. However, they could not be identical because the other characters were not coincident.

#### 2. Bythinoplectina, gen. sp. 2 (Fig. 3B)

*Specimen examined.* 1 female, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

### Subtribe Pyxidicerina

#### 3. Pyxidicerina, gen. sp. 1 (Fig. 3C)

*Specimen examined.* 1 female, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

*Remarks.* The subtribe Pyxidicerina is easily separated from the subtribe Bythinoplectina by having a pair of frontal cavities where the maxillary palpi are contracted.

#### 4. Pyxidicerina, gen. sp. 2 (Fig. 3D)

*Specimen examined.* 1 female, Ban Paksa, 1,636 m alt., 24. v. 2013, S. Nomura leg.

#### 5. Pyxidicerina, gen. sp. 3 (Fig. 3E)

*Specimens examined.* 1 male, Mt. Phou Sam Soun, 2,039 m alt., 27. v. 2013, S. Nomura leg.; 2 females. Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

### Tribe Trichonychini

#### Subtribe Panaphantina

#### 6. *Pseudoplectus?* sp. 1 (Fig. 3F)

*Specimen examined.* 1 female, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This genus is characterized by the very small and slender body. It is distributed in large area from Europe to East Asia including Southeast Asia.



Fig. 2. Snapshots of the survey at Laos in 2013–2014. A. Beating at Mt. Phou Sam Soun; B. ditto, enlarged; C. large light trap (LT); D. portable light trap (NLT); E. habitat of Pselaphines at Mt. Phou Sam Soun; F. Winkler apparatus working at the base camp.

#### Subtribe Bibloporina

##### 7. *Aphilia* sp. 1 (Fig. 3G)

*Specimen examined.* 1 female, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

*Remarks.* This genus is common in East to Southeast Asia. It is often collected by flight intercept trap (FIT).

#### Subtribe Trimiina

##### 8. *Trimium?* sp. 1 (Fig. 3H)

*Specimen examined.* 1 female, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

*Remarks.* This species is characterized by the very small body and the antennal club formed only by the antennal segment XI.



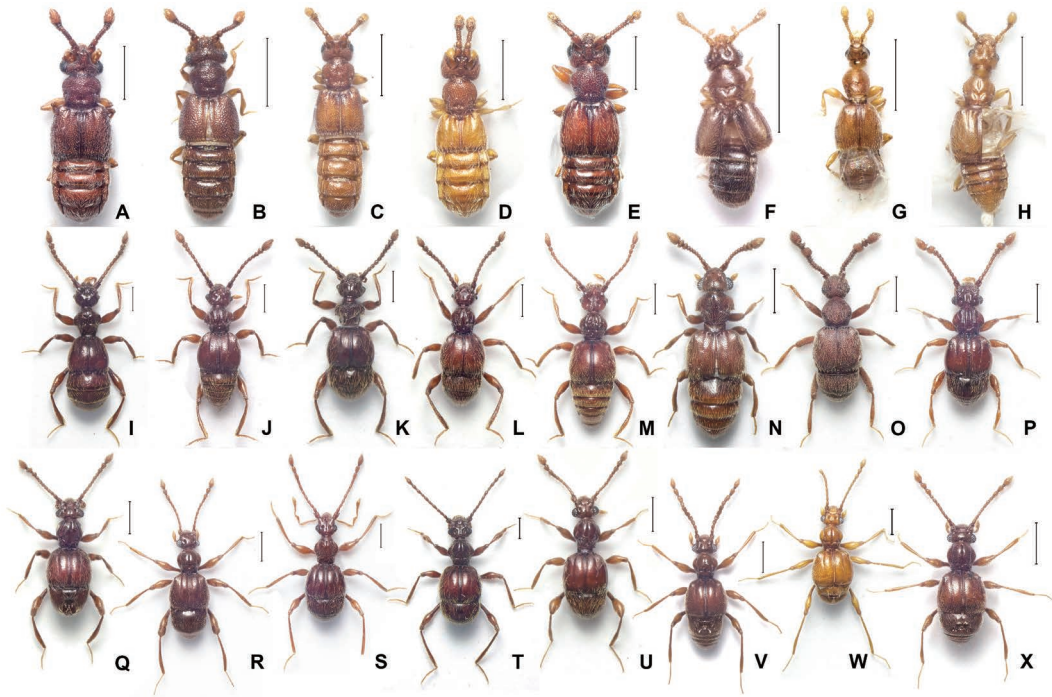


Fig. 3. Photos of pselaphine species collected in the present study 1. A. *Bythinoplectina* gen. sp. 1; B. *B.*, gen. sp. 2; C. *Pyxidicerina*, gen. sp. 1; D. *P.*, gen. sp. 2; E. *P.*, gen. sp. 3; F. *Pseudoplectus*? sp. 1; G. *Aphilia* sp. 1; H. *Trimium*? sp. 1; I. *Tribasodites* sp. 1; J. *T.* sp. 2; K. *T.* sp. 3; L. *T.* sp. 4; M. *Intestinalius* sp. 1; N. *Anama* sp. 1; O. *Sathytes* sp. 1; P. *Trisinus* sp. 1; Q. *Batrisiella* sp. 1; R. *B.* sp. 2; S. *Cratna* sp. 1; T. *Batrisina*, gen. sp. 1; U. *Physomerinus* sp. 1; V. *Arthromelodes reichenbachi* (Motschulsky, 1851); W. *A.* sp. 1; X. *A.* sp. 2.

Supertribe Batrisitae  
Tribe Batrisini  
Subtribe Batrisina

9. *Tribasodites* sp. 1 (Fig. 3I)

*Specimens examined.* 3 males, 2 females, Mt. Phou Sam Soun, 2,039 m alt., by sifting, 27. v. 2013, S. Nomura leg.; 1 male, 3 females, same locality as above, but 2,005 m alt, 28. v. 2013.

*Remarks.* The genus *Tribasodites* is separated from the allied genera by having the laterally spinulate pronotum, the trifoveate elytron, the almost flat abdominal tergite IV and the asymmetrical aedeagus with dorsal apophysis. It is a very common genus in the Oriental Region. This species is distinct in the middle sized body, large and thick abdomen, without male sexual character except for the short mucro at the apex of mid tibia.

10. *Tribasodites* sp. 2 (Fig. 3J)

*Specimen examined.* 1 male, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

11. *Tribasodites* sp. 3 (Fig. 3K)

*Specimen examined.* 1 male, Ban Muang (pinetree woods), 1,664 m alt., 26. v. 2013, S. Nomura leg.

12. *Tribasodites* sp. 4 (Fig. 3L)

*Specimen examined.* 1 female, Ban Dokmai, 1,397 m alt., by sifting, 29. v. 2013, S. Nomura leg.

13. *Intestinalius* sp. 1 (Fig. 3M)

*Specimens examined.* 2 males, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

*Remarks.* The genus *Intestinalius* was defined by Kurbatov (2007). Two species of this



genus, *I. orthopygium* and *I. crassicornis* was described from Laos together with the definition of this genus. This species is an undescribed species. It is easily separable from *I. orthopygium* or *I. crassicornis* by having the round-sided and flattened head.

14. *Anama* sp. 1 (Fig. 3N)

*Specimen examined.* 1 male, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This genus has been known from Singapore and Sumatra. Later, it was recorded from Thailand by Nomura *et al.* (2010, 2013). It is commonly collected by light trap.

15. *Sathytes* sp. 1 (Fig. 3O)

*Specimens examined.* 1 male, Ban Dokmai, 1,319m alt., by sifting, 25. v. 2013, S. Nomura leg.; 1 female, Ban Paksa, 1,636m alt., 24. v. 2013, S. Nomura leg.; 1 female, Mt. Phou Sam Soun, 2,039m alt., by sifting, 27. v. 2013, S. Nomura leg.

*Remarks.* This genus is known from the Oriental Region including Southeast Asia. In this genus, the male sexual characters are represented by the large body and the strongly thickened antennal club.

16. *Trisinus* sp. 1 (Fig. 3P)

*Specimens examined.* 2 males, 1 female, Ban Paksa, 1,636m alt., 24. v. 2013, S. Nomura leg.; 1 female, Ban Muang (pinetree woods), 1,664m alt., 26. v. 2013, S. Nomura leg.

*Remarks.* The genus *Trisinus* Raffray, 1894 is synonymized with the junior generic name *Batrisoplisus* Raffray, 1904 by Yin *et al.* (2012). The named species have been known from Singapore, Indonesia (Sumatra), China and Japan. Undescribed species of this genus are reported from Thailand by Nomura *et al.* (2010). The genus is recorded from Laos for the first time.

17. *Batrisiella* sp. 1 (Fig. 3Q)

*Specimens examined.* 1 male, Ban Dokmai, 1,319m alt., by LT, 25. v. 2013, S. Nomura leg.;

1 male, Ban Muang (pinetree woods), 1,664m alt., 26. v. 2013, S. Nomura leg.

*Remarks.* It is similar to *Arthromelodes* by the large sexual patch on the abdominal tergite IV, but easily separated by the antennal segment I with large conical trichome on the external side in both sexes.

18. *Batrisiella* sp. 2 (Fig. 3R)

*Specimen examined.* 1 male, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

19. *Cratna* sp. 1 (Fig. 3S)

*Specimen examined.* 1 female, Ban Muang (pinetree woods), 1,664m alt., 26. v. 2013, S. Nomura leg.

*Remarks.* *Cratna cicatricosa* was described from Laos by Raffray (1918), however, it is concerned to be doubtful as shown in Löbl (1975). The collected specimen shown above is a female, so it cannot be identified only by female characters.

20. *Batrisina*, gen. sp. 1 (Fig. 3T)

*Specimen examined.* 1 male, Mt. Phou Sam Soun, 2,039m alt., by beating, 27. v. 2013, S. Nomura leg.

*Remarks.* This is a member species of an unnamed species collected from China and Vietnam. It is similar to the genus *Cratna*, but separable by the short maxillary palpus and the thickened fore tibia in the male.

21. *Physomerinus* sp. 1 (Fig. 3U, 5A, B)

*Specimens examined.* 1 male, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.; 1 female, Ban Dokmai, 1,346m alt., by LT, 25. v. 2013, H. Yoshitomi leg.; 1 male, same data as above, but 1,319m alt, S. Nomura leg.

*Remarks.* The genus *Physomerinus* was defined with the type species, *P. septemfoveolatus* (Schaufuss, 1877) from Vietnam by Jeannel, 1952. This genus was also recorded from Japan and Taiwan. It is characterized by the male sex-

ual character on the hind femur.

22. \**Arthromelodes reichenbachi* (Motschulsky, 1851) (Fig. 3V)

*Specimens examined.* 4 males, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This species was described from “Ind. or.” (Indes Orientale = Tenasserim, Myanmar) as “*Batrisus reichenbachi*”. It is closely allied to the other species, *Arthromelodes cariei* described by Jeannel (1954) from Madagascar. However, the type locality was corrected to Hoa-Binh near Tonkin (= Ha Noi), Vietnam by Jeannel (1957). It is clearly identified by the sexual characters on the antenna and the abdominal tergite IV in the male, and by the simple form of the male genitalia. So, this species should be classified into the genus *Arthromelodes*. It is firstly recorded from Laos by the present study.

23. *Arthromelodes* sp. 1 (Fig. 3W)

*Specimen examined.* 1 female, Ban Dokmai, 1,346m alt., by LT, 25. v. 2013, H. Yoshitomi leg.

24. *Arthromelodes* sp. 2 (Fig. 3X)

*Specimen examined.* 1 male, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

#### Supertribe Goniaceritae Tribe Proterini

25. \**Pareuplectops coomani* Jeannel, 1957 (Fig. 4A, 5C, D)

*Specimens examined.* 3 males, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This genus was defined by Jeannel (1957) with the type species, *P. coomani* Jeannel as a member of the supertribe Euplectitae. Later,

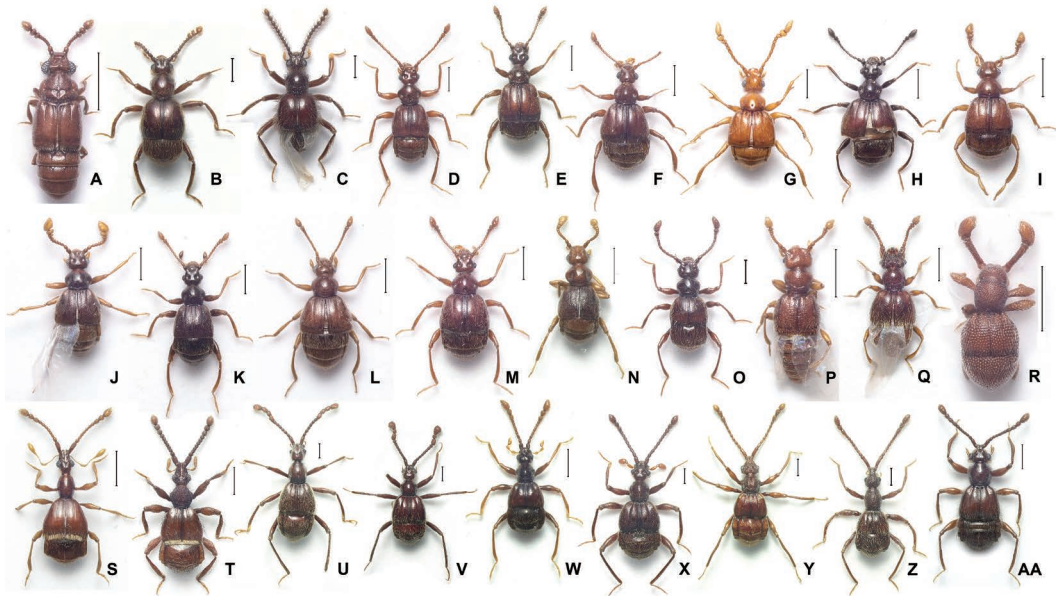


Fig. 4. Photos of pselaphine species collected in the present study 2. A. *Pareuplectops coomani* Jeannel; B. *Harmophorus* sp. 1; C. *H.* sp. 2; D. *Rybaxis* sp. 1; E. *Trissemus* sp. 1; F. *T.* sp. 2; G. *T.* sp. 3; H. *T.* sp. 4; I. *T.* sp. 5; J. *T.* sp. 6; K. *T.* sp. 7; L. *T.* sp. 8; M. *T.* sp. 9; N. Brachyglutina gen. sp. 1; O. *Batraxia* sp. 1; P. *Sunorfa* sp. 1; Q. *Morana* sp. 1; R. *Plagiophorus* sp. 1; S. *Pselaphus multangulus* (Schaufuss); T. *Curculionellus setosus* Jeannel; U. *Pseudophanias* sp. 1; V. *Pseudophanias* sp. 2; W. *Tyrodes* sp. 1; X. *Horniella* sp. 1; Y. *Pselaphodes* sp. 1; Z. *Linan* sp. 1; AA. *Centrophthalmus* sp. 1.

the other species were described by Kurbatov and Cuccodoro (2009) from Thailand and Vietnam. This species was also recorded from China by Nomura and Idris (2008). The present study is the first record of this species from Laos.

#### Tribe Arnyllini

##### 26. *Harmophorus* sp. 1 (Fig. 4B)

*Specimen examined.* 1 male, Ban Dokmai, 1,397 m alt., by sifting, 29. v. 2013, S. Nomura leg.

*Remarks.* The well-known genus *Arnyllium* Reitter, 1884 which is the type genus of the tribe Arnyllini was regarded as a junior synonym of the genus *Harmophorus* defined by Motschulsky, 1851, later. This genus is common in the Oriental Region. This species is characterized by the flattened and asymmetrical antennal club.

##### 27. *Harmophorus* sp. 2 (Fig. 4C)

*Specimen examined.* 1 male, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This genus is clearly separated from the former species by the slender and symmetrical antennal club.

#### Tribe Brachyglutini Subtribe Brachyglutina

##### 28. *Rybaxis* sp. 1 (Fig. 4D)

*Specimens examined.* 1 male, Mt. Phou Sam Soun, 2,157 m alt., from moss, 23. v. 2013, S. Nomura leg.; 1 female, Ban Paksa, 1,636 m alt., 24. v. 2013, S. Nomura leg.; 1 male, 3 females, Mt. Phou Sam Soun, 2,039 m alt., by beating, 27. v. 2013, S. Nomura leg.

*Remarks.* This genus is middle to large sized, and is mainly known from the Palaearctic Region. It is easily distinguished from the allied genera by having the pronotum with median longitudinal and a pair of lateral transverse sulci combining lateral and median foveae.

##### 29. *Trissemus* sp. 1 (Fig. 4E)

*Specimen examined.* 1 male, Mt. Phou Sam Soun, 2,157 m alt., from moss, 23. v. 2013, S. Nomura leg.

*Remarks.* The genus *Trissemus* is separable from the other Brachyglutine genera by the trifoveate head, the pronotum with a basimedial and a pair of basilateral foveae and the elytron with three basal foveae. This species is characterized by the thickened antennal club in the male.

##### 30. *Trissemus* sp. 2 (Fig. 4F)

*Specimen examined.* 1 male, Mt. Phou Sam Soun, 2,039 m alt., by beating, 27. v. 2013, S. Nomura leg.

*Remarks.* This species is different from the allied species by the apically thickened and curved hind tibia in the male.

##### 31. *Trissemus* sp. 3 (Fig. 4G)

*Specimen examined.* 1 male, 1 female, Ban Dokmai, 1,346 m alt., by LT, 25. v. 2013, H. Yoshitomi leg.

*Remarks.* This species is very different from the congeneric species by having the strongly swollen antennomere X, the fore tibia with large denticle on inner side, and the denticulate mid femur and mid tibia.

##### 32. *Trissemus* sp. 4 (Fig. 4H)

*Specimen examined.* 1 female, Mt. Phou Sam Soun, 2,039 m alt., by beating, 27. v. 2013, S. Nomura leg.

*Remarks.* This species is easily separated by the other species by the blackish colored body.

##### 33. *Trissemus* sp. 5 (Fig. 4I)

*Specimens examined.* 2 males, 2 females, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This small-sized species is very characteristic in the strongly swollen antennal club and the large and thickened hind tarsus in the male.



34. *Trissemus* sp. 6 (Fig. 4J)

*Specimens examined.* 2 males, Mt. Phou Sam Soun, 2,005 m alt., from moss, 28. v. 2013, S. Nomura leg.

*Remarks.* This species is similar to the former species in having the swollen antennal club in the male, but is separable by the larger body and the slender hind tarsus.

35. *Trissemus* sp. 7 (Fig. 4K)

*Specimens examined.* 1 male, 5 females, Mt. Phou Sam Soun, 2,157 m alt., from moss, 23. v. 2013, S. Nomura leg.; 1 female, same data as above, but 2,039 m alt., by beating, 27. v. 2013; 2 females, same data as above, but 2,005 m alt., from moss, 28. v. 2013.

*Remarks.* This large-sized and slightly flattened species is without sexual character on the head and the thorax.

36. *Trissemus* sp. 8 (Fig. 4L)

*Specimens examined.* 4 males, 12 females, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This and the next species are characteristic in the genus by the middle-sized fat body. This species is without sexual character on the head and the thorax.

37. *Trissemus* sp. 9 (Fig. 4M)

*Specimens examined.* 1 male, Ban Muang (pinetree woods), 1,664 m alt., 26. v. 2013, S. Nomura leg.; 1 male, Mt. Phou Sam Soun, 2,005 m alt., from moss, 28. v. 2013, S. Nomura leg.

*Remarks.* This species is very similar to the former species, but separable by the mid tibia with very short mucro in the male.

38. *Brachyglutina* gen. sp. 1 (Fig. 4N)

*Specimens examined.* 1 male, 2 females, Mt. Phou Sam Soun, 2,005 m alt., from moss, 28. v. 2013, S. Nomura leg.

*Remarks.* This unnamed genus is characterized by the small sized body, the strongly swollen antennal club, the smooth and shiny surface of

the pronotum, and the coarsely punctate elytra.

39. *Batraxis* sp. 1 (Fig. 4O)

*Specimens examined.* 2 females, Ban Dokmai, 1,397 m alt., by sifting, 29. v. 2013, S. Nomura leg.

*Remarks.* This genus is common in Southeast Asia. It is characterized by the thick body, the glabrous integument in many cases, the asymmetrical antennal club formed only from the segment XI, and the slender tibiae with a few swellings.

Tribe Iniocyphini  
Subtribe Natypleurina

40. *Sunorfa* sp. 1 (Fig. 4P)

*Specimen examined.* 1 female, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

*Remarks.* This small-sized genus is known from Asia and Oceania. It is distinct by the slightly flattened body and the short abdominal tergite IV.

41. *Morana* sp. 1 (Fig. 4Q)

*Specimen examined.* 1 male, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

*Remarks.* This genus is similar to the genus *Sunorfa* in the small-sized body, the short antenna and the short and slender legs, but it is distinguishable by the more flattened body and the very large abdominal tergite IV.

Tribe Cyathigerini

42. *Plagiophorus* sp. 1 (Fig. 4R)

*Specimens examined.* 1 male, Ban Dokmai, 1,329 m alt., 29. v. 2013, S. Nomura leg.; 1 female, Ban Paksa, 1,636 m alt., 24. v. 2013, S. Nomura leg.

*Remarks.* This large genus is very diversified in the Oriental Region. It includes many unnamed species in SE Asia. This species is characteristic in having the small sized body, the ten-segmented antenna and the kidney like antennomere X.

## Supertribe Pselaphitae

## Tribe Pselaphini

43. \**Pselaphus multangulus* Schaufuss, 1877 (Fig. 4S)

*Specimens examined.* 2 females, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This species was described from Siam (= Thailand) by Schaufuss, 1877 as a member species of the genus *Pselaphus*. It was also recorded from Vietnam and moved to the genus *Pselaphidius* in Nomura (2013). However, this genus was synonymized with *Pselaphus* by Löbl and Besuchet (2004) as shown in Nomura and Mohamed (2008). This species is recorded from Laos by the present study for the first time.

44. *Curculionellus setosus* Jeannel (Fig. 4T, 5E, F)

*Specimen examined.* 1 male, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This species was described from Saigon (= Ho Chi Minh City), S Vietnam. It was also recorded from Thailand by Nomura and Idris (2008). It is recorded from Laos by the present study for the first time.

## Tribe Tmesiphorini

45. *Pseudophanias* sp. 1 (Fig. 4U)

*Specimens examined.* 1 male, Mt. Phou Sam Soun, 2,039 m alt., by beating, 27. v. 2013, T. Mita leg.; 2 females, Ban Dokmai, 1,329 m alt., 29. v. 2013, H. Yoshitomi leg.

*Remarks.* The genus *Pseudophanias* was defined by Raffray (1890). It is distributed in large area of the Oriental Region. It was classified into the tribe Phalepsini in Newton and Chandler (1989), but recently, it is usually included in the tribe Tmesiphorini. This species is characterized by the four segmented antennal club.

46. *Pseudophanias* sp. 2 (Fig. 4V)

*Specimen examined.* 1 male, Ban Dokmai,

1,329 m alt., 29. v. 2013, S. Nomura leg.

*Remarks.* This species is similar to the former species, but it is separable by the antennal club formed by three apical antennal segments.

## Tribe Tyrini

## Subtribe Tyrina

47. *Tyrodes* sp. 1 (Fig. 4W)

*Specimens examined.* 1 male, Mt. Phou Sam Soun, 2,005 m alt., from moss, 28. v. 2013, S. Nomura leg.; 1 female, same data as above, but by sifting.

*Remarks.* This genus is very similar to the genus *Tyrus*, but it is separable by the abdominal tergite IV without median longitudinal carina.

48. *Horniella* sp. 1 (Fig. 4X)

*Specimen examined.* 1 male, Ban Muang (pinetree woods), 1,664 m alt., 26. v. 2013, S. Nomura leg.

*Remarks.* This is very large and stout pselaphine genus mainly distributed in the Oriental Region. It is characterized by the large and oval segment IV of the maxillary palpus.

49. *Pselaphodes* sp. 1 (Fig. 4Y)

*Specimens examined.* 1 female, Mt. Phou Sam Soun, 2,157 m alt., by sifting, 23. v. 2013, S. Nomura leg.; 2 males, same locality as above, but, 2,005 m alt., 28. v. 2013, H. Yoshitomi leg.

*Remarks.* The genus *Pselaphodes* Westwood, 1900 is a large-sized pselaphine group including many species known from East to Southeast Asia. Many species were recently described by Dr. Ziwei Yin in Shanghai from southern part of China (Yin *et al.*, 2010, etc.).

50. *Linan* sp. 1 (Fig. 4Z)

*Specimens examined.* 3 females, Mt. Phou Sam Soun, 2,039 m alt., by sifting, 27. v. 2013, S. Nomura leg.; 1 female, same locality as above, but, 2005 m alt., 28. v. 2013.

*Remarks.* This genus was defined by Hlaváč (2002). He described a new species, *L. cardinalis* from NW Thailand. Yin *et al.* (2011) revised this

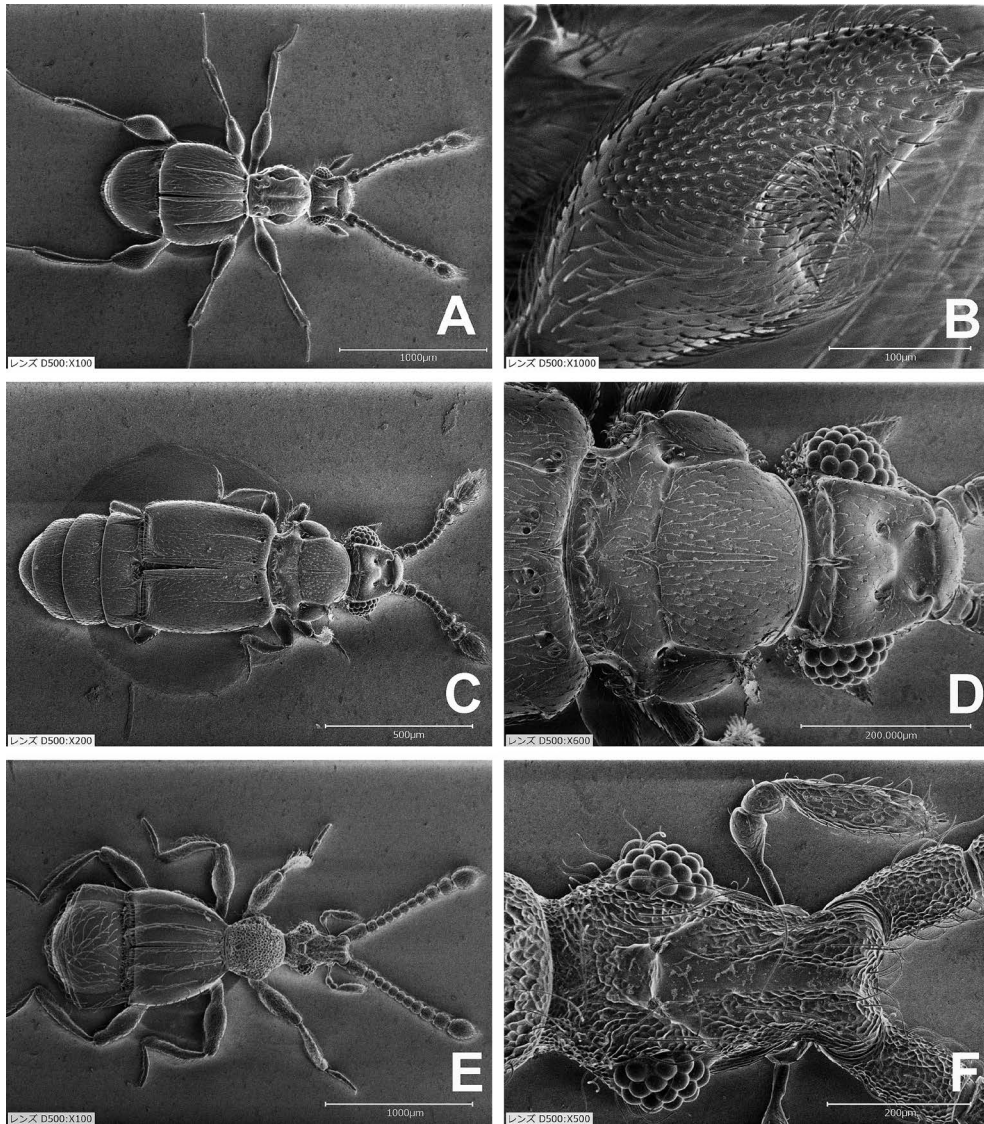


Fig. 5. SEM photos of pselaphine species. A. *Physomerinus septemfoveolatus*, habitus; B. ditto, hind femur in lateral view; C. *Pareuplectops coomani*, habitus; D. ditto, head and pronotum in dorsal view; E. *Curculionellus setosus*, habitus; F. ditto, head in dorsal view.

genus and recorded *L. cardinalis* from some localities of S China. The species from Laos shown above is seemingly allied to *L. cardinalis*. However, it couldn't be certified because the male character of this species is lacking.

#### Subtribe Centrophthalmina

##### 51. *Centrophthalmus* sp. 1 (Fig. 4AA)

*Specimens examined.* 3 males, 1 female, Nr. Muang Kham (Wat Thana Tham Spa), by LT, 12–19. vii. 2014, Y. Nakase leg.

*Remarks.* This genus is distinct in the middle-sized body covered with long hairs, and the maxillary palpus containing large and ovoid seg-



ment III and very small and conical segment IV. It includes many species in Tropical to Subtropical Asia.

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### Literature Cited

- Coulon, G. 1989. Révision générique des Bythinoplectini Schaufuss, 1890 (= Pyxidicerini Raffray, 1903, syn. nov.) (Coleoptera, Pselaphidae, Farininae). Mémoires de la Société Royale Belge d'Entomologie, 34: 1–282.
- Hlaváč, P. 2002. A taxonomic revision of the Tyrini of the Oriental region. II. Systematic study on the genus *Pselaphodes* and its allied genera (Coleoptera: Staphylinidae: Pselaphinae). Annales de la Société Entomologique de France, 38: 283–297.
- Jeannel, R. 1952. Psélaphides de Saïgon. Revue Française de Entomologie, 19: 69–113.
- Jeannel, R. 1954. Les Pselaphides de Madagascar. Mémoires de l'Institut Scientifique de Madagascar, Série E: Entomologie, 4: 151–344.
- Jeannel, R. 1957. Sur quelques Psélaphides de Tonkin recueillis par le père A. De Cooman. Revue française de Entomologie, 24: 5–32.
- Kurbatov, S. A. 2007. Revision of the genus *Intestinarius* gen. n. from Southeast Asia, with notes on a probable autapomorphy of Batrisitae (Coleoptera: Staphylinidae: Pselaphinae). Russian Entomological Journal, 16: 281–295.
- Kurbatov, S. A. and G. Cuccodoro 2009. Revision of *Pareuplectops* Jeannel and description of a new affiliated genus from Australia (Coleoptera: Staphylinidae: Pselaphinae). Revue Suisse de Zoologie, 116: 3–29.
- Löbl, I. 1975. Revision der Gattung *Cratna* Raffray (Coleoptera, Pselaphidae). Annales de la Société Suisse de Zoologie et du Muséum d'Histoire Naturelle de Genève, 82: 563–583.
- Löbl, I. and C. Besuchet 2004. Pselaphinae. In Löbl and Smetana (eds): Catalogue of Palearctic Coleoptera, Volume 2. Hydrophiloidea–Histeroidea–Staphylinioidae. Apollo Books, pp. 272–329.
- Motschulsky, V. 1851. Énumération des nouvelles espèces de Coléoptères. Bulletin de la Société Impériale des Naturalistes de Moscou, 24: 479–511.
- Newton, A. and D. S. Chandler 1989. World catalog of the genera of Pselaphidae (Coleoptera). Fieldiana Zoology, n. s., (53): 1–93.
- Nomura, S. 2010. A taxonomical Revision of Asian genera and species of the tribe Dimerini (Coleoptera, Staphylinidae, Pselaphinae). Japanese Journal of Systematic Entomology, Matsuyama, 16: 221–247.
- Nomura, S. 2013. A checklist of the pselaphine species (Coleoptera, Staphylinidae) from Vietnam. Japanese Journal of Systematic Entomology, 19: 233–242.
- Nomura, S. and A. G. Idris 2008. New records and two new synonyms of pselaphine species (Coleoptera, Staphylinidae; Pselaphinae) from Southeast Asia. Serangga, Bangi, 13: 39–69.
- Nomura, S. and M. Mohamed 2008. A faunistic review of the pselaphine species (Insecta, Coleoptera, Staphylinidae) known from Borneo. Memoirs of the National Science Museum, Series A, (45): 13–40.
- Nomura, S., W. Sakchoowong, K. Ogata and J. Chanpaisaeng 2008a. A faunistic review of the pselaphine and protopselaphine species known from Thailand (Insecta, Coleoptera, Staphylinidae) Part 1. A list of known species from Thailand. Report on Insect Inventory Project in Tropical Asia (TAIV), pp. 253–264.
- Nomura, S., W. Sakchoowong, K. Ogata and J. Chanpaisaeng 2008b. Lists of pselaphine and protopselaphine species (Coleoptera, Staphylinidae) collected from Doi Inthanon and Khao Yai National Parks. Report on Insect Inventory Project in Tropical Asia (TAIV), pp. 265–294.
- Nomura, S., W. Sakchoowong, and J. Chanpaisaeng 2010. A list of the pselaphine species (Insecta, Coleoptera, Staphylinidae) collected from the Kaeng Krachan National Park, West Thailand. Bulletin of the National Museum of Nature and Science, Series A, 36: 7–25.
- Nomura, S., W. Sakchoowong and M. Maruyama 2013. Further study on the pselaphine fauna (Insecta, Coleoptera, Staphylinidae) of the Kaeng Krachan National Park, West Thailand in 2010–2012. Bulletin of the National Museum of Nature and Science, Series A, 39: 73–92.
- Raffray, A. 1890. Étude sur les Psélaphides. VI, Diagnoses des espèces nouvelles sur lesquelles sont fondés des genres nouveaux. Revue d'Entomologie, Caen, 9: 193–219.
- Raffray, A. 1918. Nouvelle espèces de Pselaphides (Para-

- guay-Laos-Philippines). *Annales de la Société entomologique de France*, 86: 473–502.
- Schaufuss, L. W. 1877. *Pselaphiden Siam's*. 25 pp. Ferdinand Thomass, Dresden.
- Yin, Z.-w., L.-z. Li and M.-j. Zhao 2010. Taxonomical study on the genus *Pselaphodes* Westwood (Coleoptera: Staphylinidae: Pselaphinae) from China, Part 1. *Zootaxa*, 2512: 1–25.
- Yin, Z.-w., L.-z. Li and M.-j. Zhao 2011. A review of the genus *Linan* (Coleoptera: Staphylinidae: Pselaphinae). *Acta Entomologica Musei Nationalis Pragae*, 51: 123–135.
- Yin, Z.-w., S. Nomura and L.-z. Li 2012. A taxonomic revision of the genus *Sinotrisus* Yin & Li (Coleoptera, Staphylinidae, Pselaphinae). *Zookeys*, 205: 45–57.